

**ABSTRACT**

A method is presented including assigning a first register class to at least one symbolic register in at least one instruction, determining and assigning a second register class to the at least one register, reducing register class fixups and renaming the at least one symbolic register. Also presented is a system including a processor having at least one register and a compiler executing in the processor that inputs a source program having many operation blocks. The compiler assigns a first register class in at least one instruction to at least one symbolic register, determines and assigns a second register class to the at least one symbolic register, reduces register class fixups, and renames the at least one symbolic register.